AMENDMENTS TO THE SPECIFICATION

Please replace paragraph beginning on page 4, line 7, with the following amended paragraph:

Referring now more particularly to Figure 1 there is illustrated in exploded view the components of a self chilling beverage container constructed in accordance with the principles of the present invention. Although the present invention is equally applicable to self-chilling or self-heating food or beverage containers, the following description is given with respect to a self-chilling beverage container for purposes of ~~use~~ ease of illustration and description but without limitation of the invention. As is therein shown, the overall self-chilling beverage assembly 10 includes a beverage can 12 having a bottom 14 and a top (not shown). A heat exchange unit (HEU) comprises a vessel 16 having a lid 18 which will be affixed to the vessel 16 by crimping, welding, adhesives or the like. The HEU may be a single piece structure with the top necked in for attachment. The vessel 16 contains a refrigerant which may be any known to the art type of material such as hydro fluro-carbons, chloror fluro carbons, carbon dioxide, a mixture of hydro carbons and halogen gases or the like. In the presently preferred embodiment of this invention the refrigerant is a carbon dioxide-carbon adsorbent/desorbent system of the type disclosed in U.S. Patent 5,692,381 to which reference is hereby made and by such reference is incorporated herein. When a device of the type utilizing the carbon-dioxide system as the refrigerant is used, it becomes desirable to provide a heat sink such as is illustrated at 20 to assist in conducting the heat in the beverage contained within the beverage can 12 from the surface of the heat exchange vessel 16 internally to be exhausted from the system 10 upon activation of the heat exchange unit. Also provided is a valve cup 22 which includes a valve 24 secured thereto. A protective cover or cap 26 fits over the valve 24 to protect it from inadvertent actuation thereby activating the heat exchange unit when such is not desired and to provide an indicator to the consumer that the unit has not been activated. The combination of the valve cup 22 and the heat exchange unit must be affixed to the bottom 14 of the beverage can 12. Such is done by providing a downwardly directed flange 28 in the bottom 14 of the can. That flange is sandwiched between the valve cup 22 and the cap or top 18 of the heat exchange unit and the material, preferably metal, from which these units are formed, is then formed such as by crimping or swaging to secure these elements together and thereby to affix the heat exchange unit permanently to the bottom 14 of the beverage can 12. An elastomeric material such as a washer 30 is positioned between the flange 28 and the inner surface 32 of the cap 18 of the heat exchange unit to provide an effective seal there between. A similar elastomeric material is coated on the exterior surface of the valve cup 22 and thus also provides a seal between the valve cup 22 and the beverage can 14. The critical factor in accordance the principles of the present invention is to provide a means for sealing and permanently attaching the heat exchange unit to the bottom of the beverage can. In accordance with the principles of the present invention this means is the downwardly directed flange 28 which as will become apparent below is formed as an integral part of the beverage can 12. Although the flange ~~si~~ is shown directed downwardly in Fig. 1, it should be understood that with certain modifications the flange may be directed upwardly (out of the container).

Please replace paragraph beginning on page 7, line 25, with the following amended paragraph:

In some applications it is desirable to affix the valve and valve cup by assembly to the can in such manner that there is no possibility of an internal leakage path for the refrigerant (or exothermic materials) to enter the food or beverage in the container. Such may be done by reversing the flange forming procedure as above described. The can 12 is positioned with the opening 50 centered over the bore 64 in the anvil but with the side or body of the can extending upwardly as viewed in Fig. 4. The punch 66 is directed downwardly as above described with the result that the direction of the flange is upwardly (out of the container) as viewed in Fig. 5, and as shown by the dashed line 28. The flange 28 may then be curled over with an extension of the HEU and the valve cup received and formed as above described to provide an effective sealed permanently affixed HEU.

Please replace paragraph beginning on page 8, line 7, with the following amended paragraph:

In some instances where the container is made of aluminum material the flange may be annealed to prevent further cracking when the crimping occurs. Such annealing may be accomplished by use of a polishing wheel which rotates at a high speed in contact with the flange. Such raises the temperature of the flange sufficiently to anneal it.

Please replace paragraph beginning on page 8, line 11, with the following amended paragraph:

Referring now more particularly to Figure 6, there is illustrated in schematic form and in partial cross-section a completed self-cooling beverage system constructed in accordance with the principles of the present invention. As is therein shown the system 110 includes the beverage can 112 having a bottom 114 and a top 116. The beverage can 112 contains a beverage 118. A heat exchange unit 122 having a valve cup 124 including a valve 125 disposed therein and having a button 126 which may be depressed to activate the valve is provided. The bottom 114 of the can 112 has an opening and a downwardly depending flange 128 which is sandwiched between the upper end 132 of the heat exchange unit 122 and the valve cup 134. As above-described an appropriate elastomeric washer is disposed between the surfaces of the flange 128 and the valve cup and heat exchange unit to effect the desired seals. A protective cap 136 is disposed over the valve 125 and is held in place by snapping the same downwardly through the utilization of an appropriate retaining clip 138. When the upper surface of the protective cover 136 is depressed downwardly it will contact the button or plunger 126 activating the valve 125 to release the refrigerant contained within the heat exchange unit 122. If the heat exchange unit utilizes a carbon carbon-dioxide system as above described then the appropriate heat sink 140 is disposed internally of the heat exchange unit 122 and is in the form of a plurality of ribs 142 through 148 which converge at a central point 150. Each of the ribs is in contact with the inner wall of the HEU 122 and conducts the heat contained within the beverage 118 internally through the carbon so that it may be exhausted upwardly through the valve 125 with the escaping carbon-dioxide gas. Obviously, the heat exchange unit and the refrigerant may take many other forms and may also be replaced by an ~~exothemic~~ exothermic reaction system without departing from the spirit or scope of the present invention which is directed to the manner of attaching the heat exchange unit to the bottom of the food or beverage container.